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WebSphere Systems Console ("WSC"), a commercially-available product of IBM, provides a Web- and J2EE -based console, but techniques disclosed herein go considerably further in terms of extensibility and flexibility. For example, content modules added to WSC allow attaching tasks at various points in the console using an extended Eclipse plug-in model. Although WSC allows extension console modules to be installed and uninstalled to form a solution, the module install/uninstall cannot be performed while the console application is running (i.e., dynamically, as is possible in the present invention). Furthermore, WSC does not enable end users or system integrators to rearrange content in completely new ways. In addition, an embodiment of the present invention may provide a console that has, within the same display infrastructure, content from other end user applications which are not related to administration. For example, a user may configure his or her administration console to also contain a view of real-time stock quotes (or other user-selected content) when using the present invention. No prior art consoles are known that provide this degree of flexibility and adaptability.

The IBM Console, a commercially-available component included in several products of IBM, is a proprietary (i.e., non-standards-based) approach to an integrated console, and provides an integrated user experience across product boundaries with the intent of consolidating content and providing tighter integration between products along with a consistent user interface. This IBM Console aims to let users accomplish tasks without having to interact with many consoles, products, or servers directly. However, this IBM Console does not enable aggregating content onto a single page, and does not enable end users or system integrators to rearrange content in completely new ways, in contrast to the present invention. Furthermore, the IBM Console does not provide a solution based upon industry standards, in contrast to an embodiment of the present invention.

Optionally, an embodiment of the present invention may be adapted for generating the console as either a Web-based console or an installed console (where this decision may be made, for example, by interrogating the value of a configured parameter).

As will be appreciated by one of skill in the art, embodiments of techniques of the present invention may be provided as methods, systems, or computer program products. Preferably, an implementation of techniques of the present invention is provided in software, although implementations provided in hardware or firmware, or combinations of software with hardware and/or firmware, are also within the scope of the present invention. Furthermore, an implementation of techniques of the present invention may take the form of a computer program product which is embodied on one or more computer-usable storage media (including, but not limited to, disk storage, CD-ROM, optical storage, and so forth) having computer-usable program code embodied therein.

The present invention has been described with reference to flowchart illustrations and/or block diagrams of methods, apparatus (systems), and computer program products according to embodiments of the invention. It will be understood that each block of the flowchart illustrations and/or block diagrams, and combinations of blocks in the flowchart illustrations and/or block diagrams, can be implemented by computer program instructions. These computer program instructions may be provided to a processor of a general purpose computer, special purpose computer, embedded processor, or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer or other programmable data pro-

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cessing apparatus, create means for implementing the functions specified in the flowchart and/or block diagram block or blocks.

These computer program instructions may also be stored in a computer-readable memory that can direct a computer or other programmable data processing apparatus to function in a particular manner, such that the instructions stored in the computer-readable memory produce an article of manufacture including instruction means which implement the function specified in the flowchart and/or block diagram block or blocks.

The computer program instructions may also be loaded onto a computer or other programmable data processing apparatus to cause a series of operational steps to be performed on the computer or other programmable apparatus to produce a computer-implemented process such that the instructions which execute on the computer or other programmable apparatus provide steps for implementing the functions specified in the flowchart and/or block diagram block or blocks.

While preferred embodiments of the present invention have been described, additional variations and modifications in those embodiments may occur to those skilled in the art once they learn of the basic inventive concepts. Therefore, it is intended that the appended claims shall be construed to include preferred embodiments and all such variations and modifications as fall within the spirit and scope of the invention.

What is claimed is:

1. A computer-implemented method of building an administration console as a network-accessible application in a networking environment, comprising:

for each of a plurality of resources to be administered using the administration console, programmatically and dynamically tailoring the administration console to the plurality of resources to be administered therewith, further comprising:

responsive to deployment of each one of the resources in the networking environment, programmatically plugging in, to a content aggregation framework for building the administration console while the content aggregation framework is executing, at least one console module comprising functionality for administering that one of the resources in the networking environment; and

responsive to undeployment of any one of the resources in the networking environment, programmatically unplugging, from the content aggregation framework while the content aggregation framework is executing, each console module previously plugged in to the content aggregation framework for that one of the resources;

for each of the programmatically plugged in console modules, dynamically adding, to a navigation pane in a view rendered in a displayed page of the administration console, each of at least one selectable entry associated with that console module, wherein the selectable entries in the navigation pane are defined in a markup language document corresponding to each of the plugged-in console modules and represent selectable links to tasks that are invocable for administering the resources to be administered with the administration console; and

responsive to selection of one of the selectable entries in the navigation pane, invoking the corresponding task and rendering a view, on the administration console, comprising content created responsive to the invoked task, according to layout information associated with the